

CLAIMS

What is claimed is:

1. A pneumatic tire comprising a tread and shoulders adjacent the tread, the tread comprising a central region and a pair of opposing side regions, the tread further comprising a circumferentially extending rib in the central region, and a plurality of steeply slanted grooves inclined at an angle relative to the circumferential direction of the tire in each side region,
wherein the steeply slanted grooves in each side region initiate at the junction of the central region and the side regions and terminate in the shoulders, the adjacent steeply slanted grooves meeting to form circumferentially adjacent tread blocks, the blocks extending from the central region to the shoulders, and chamfers located at the axially innermost point of the block, the chamfers extending into the junction of the steeply slanted grooves,
wherein the lateral edges of the rib have a plurality of laterally oriented edges, the laterally oriented edges on each side of the rib being circumferentially offset from the laterally oriented edges on the opposing side of the ribs, and extending from each laterally oriented edge toward the circumferentially adjacent laterally oriented edge is a chamfer, the chamfer circumferentially extending along the lateral edge of the rib, and
wherein the block chamfer in each side region and the rib chamfer located on the adjacent lateral edge of the rib are axially adjacent.
2. The tire of claim 1 wherein the tread blocks extend continuously from the central region to the shoulders.
3. The tire of claim 1 wherein the rib has a plurality of circumferentially extended edges that meet each laterally oriented edge, and wherein each rib chamfer extends from the laterally oriented edge and decreases in width from the laterally oriented edge to the circumferentially adjacent laterally oriented edge.

4. The tire of claim 3 wherein the radial height of the rib chamfer decreases from the laterally oriented edge to the circumferentially adjacent laterally oriented edge.
5. The tire of claim 3 wherein the axially outermost edge of the chamfer, relative to the central region of the tire, gradually increases in height from the laterally oriented edge to the adjacent laterally oriented edge, while the axially innermost edge of the chamfer gradually decreases in height.
6. The tire of claim 1 wherein the steeply slanted grooves have a non-constant width as the grooves extend from the central region to the shoulders, the grooves having a maximum width in the central 15% of each side region of the tread.
7. The tire of claim 6 wherein the grooves have a maximum width of at least 1.5 times the minimum groove width of the steeply slanted grooves.
8. The tire of claim 1 wherein the tread rib has a plurality of sipes, the sipes have a density of 2 to 8 sipes per inch (0.78-3.15 per cm).
9. The tire of claim 8 wherein the sipes extend laterally into the chamfers.
10. The tire of claim 1 wherein the net-to-gross ratio of the tire decreases from the tread edge toward the tread center, with a maximum net-to-gross ratio at the equatorial plane of the tire.
11. The tire of claim 1 wherein the net-to-gross ratio on each side of the rib, measured from the axially innermost edge of the rib chamfer to the axially outermost edge of the block chamfer, is in the range of 22 to 35%.